Applicant: Aladar Szalay et al. Attorney's Docket No.: 17248-004002/4804B

Serial No.: 10/849,664 Filed: May 19, 2004

**AMENDMENT** 

## AMENDMENTS TO THE CLAIMS:

Please amend claims 33, 34 and 35 as follows. Please cancel claims 48-50. Please add Claim 80. This listing of claims will replace all prior versions, and listings of claims, in the application.

## **LISTING OF CLAIMS:**

1-32. (Canceled)

33. (Currently Amended) A method for detecting the presence or absence of a wound or wounded tissue, comprising:

monitoring a subject to whom a detectable microorganism or cell has been administered for detection of the microorganism or cell; and

detecting the presence or absence of the detectable microorganism or cell, thereby detecting the presence or absence of a wound or wounded tissue, wherein:

the subject is one who is being evaluated for the presence or absence of a wound or wounded tissue;

the microorganism or cell is non-pathogenic or attenuated; and the microorganism or cell is recognized by the immune system of the subject.

34. (Currently Amended) A method for detecting the presence or absence of an inflammation site or inflamed tissue, comprising:

monitoring a subject to whom a detectable microorganism or cell has been administered for detection of the microorganism or cell; and

detecting the presence or absence of the detectable microorganism or cell, thereby detecting the presence or absence of an inflammation site or inflamed tissue, wherein:

the subject is one who is being evaluated for the presence or absence of an inflammation site or inflamed tissue;

the microorganism or cell is non-pathogenic or attenuated; and the microorganism or cell is recognized by the immune system of the subject.

35. (Currently Amended) A method for detecting the presence or absence of a disease or condition in a subject, comprising:

monitoring a subject to whom a detectable microorganism or cell has been administered for detection of the microorganism or cell; and

detecting the presence or absence of the detectable microorganism or cell, thereby detecting the presence or absence of a disease or condition, wherein:

the disease or condition is selected from the group consisting of endocarditis, pericarditis, inflammatory bowel disease, Crohn's disease, ulcerative colitis, low back pain, herniated nucleus pulposis, temporal arteritis, polyarteritis nodosa, an arthritic disease, atherosclerotic plaque, coronary artery disease, peripheral vascular disease, cerebral artery disease, auto-immune disease, rheumatoid arthritis, multiple sclerosis, Alzheimer's disease, a fracture, an incision and a burn; and

the subject is one who is being evaluated for the presence or absence of the disease or condition;

the microorganism or cell is non-pathogenic or attenuated; and

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## the microorganism or cell is recognized by the immune system of the subject.

36. (Previously presented) The method of claim 33, wherein the microorganism is a bacterium.

- 37. (Previously presented) The method of claim 34, wherein the microorganism is a bacterium.
- 38. (Previously presented) The method of claim 35, wherein the microorganism is a bacterium.
- 39. (Previously presented) The method of claim 35, wherein the condition is an atherosclerotic plaque.
- 40. (Previously presented) The method of claim 33, wherein the microorganism or cell:
- (a) is specifically retained at a wound or wounded tissue due only to protection of the microorganism or cell in the wound or wounded tissue from being cleared from a subject by the immune system; and/or
- (b) is cleared from a subject without affecting normal tissues that are not a wound or wounded tissue.
- 41. (Previously presented) The method of claim 34, wherein the microorganism or cell:
- (a) is specifically retained at an inflammation site or inflamed tissue due only to protection of the microorganism or cell in the inflammation site or inflamed tissue from being cleared from a subject by the immune system; and/or
- (b) is cleared from a subject without affecting normal tissues that are not an inflammation site or inflamed tissue.
- 42. (Previously presented) The method of claim 33, wherein the microorganism or cell is capable of replicating.
- 43. (Previously presented) The method of claim 34, wherein the microorganism or cell is capable of replicating.
- 44. (Previously presented) The method of claim 35, wherein the microorganism or cell is capable of replicating.
- 45. (Previously presented) The method of claim 33, wherein the microorganism or cell was administered intravenously into the subject.
- 46. (Previously presented) The method of claim 34, wherein the microorganism or cell was administered intravenously into the subject.
- 47. (Previously presented) The method of claim 35, wherein the microorganism or cell was administered intravenously into the subject.
  - 48-50. (Cancelled).

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51. (Previously presented) The method of claim 36, wherein the bacterium is selected from the group consisting of *Salmonella*, *Vibrio*, *Listeria* and *Escherichia*.

- 52. (Previously presented) The method of claim 37, wherein the bacterium is selected from the group consisting of *Salmonella*, *Vibrio*, *Listeria* and *Escherichia*.
- 53. (Previously presented) The method of claim 38, wherein the bacterium is selected from the group consisting of *Salmonella*, *Vibrio*, *Listeria* and *Escherichia*.
- 54. (Previously presented) The method of claim 51, wherein the bacterium is selected from the group consisting of Salmonella typhimurium, Vibrio cholerae, Listeria monocytogenes and Escherichia coli.
- 55. (Previously presented) The method of claim 52, wherein the bacterium is selected from the group consisting of Salmonella typhimurium, Vibrio cholerae, Listeria monocytogenes and Escherichia coli.
- 56. (Previously presented) The method of claim 53, wherein the bacterium is selected from the group consisting of Salmonella typhimurium, Vibrio cholerae, Listeria monocytogenes and Escherichia coli.
- 57. (Previously presented) The method of claim 33, wherein the microorganism or cell allows for visualization of a wound or wounded tissue.
- 58. (Previously presented) The method of claim 34, wherein the microorganism or cell allows for visualization of an inflammation site or inflamed tissue.
- 59. (Previously presented) The method of claim 33, wherein the microorganism or cell allows for external visualization of the wound or wounded tissue.
- 60. (Previously presented) The method of claim 34, wherein the microorganism or cell allows for external visualization of an inflammation site or inflamed tissue.
- 61. (Previously presented) The method of claim 33, wherein detection is based on a signal.
- 62. (Previously presented) The method of claim 34, wherein detection is based on a signal.
- 63. (Previously presented) The method of claim 35, wherein detection is based on a signal.
- 64. (Previously presented) The method of claim 61, wherein the signal is detectable by magnetic resonance imaging (MRI).
- 65. (Previously presented) The method of claim 62, wherein the signal is detectable by magnetic resonance imaging (MRI).

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66. (Previously presented) The method of claim 63, wherein the signal is detectable by magnetic resonance imaging (MRI).

- 67. (Previously presented) The method of claim 33, wherein the microorganism or cell comprises DNA encoding a protein that can bind a contrasting agent, chromophore or a compound or ligand for visualization of a wound or wounded tissue.
- 68. (Previously presented) The method of claim 34, wherein the microorganism or cell comprises DNA encoding a protein that can bind a contrasting agent, chromophore or a compound or ligand for visualization of an inflammation site or inflamed tissue.
- 69. (Previously presented) The method of claim 33, wherein the microorganism or cell allows for detection of a wound or wounded tissue through detection of light.
- 70. (Previously presented) The method of claim 34, wherein the microorganism or cell allows for detection of an inflammation site or inflamed tissue through detection of light.
- 71. (Previously presented) The method of claim 33, wherein the microorganism or cell comprises DNA encoding a fluorescent protein, luminescent protein or metal-binding protein.
- 72. (Previously presented) The method of claim 34, wherein the microorganism or cell comprises DNA encoding a fluorescent protein, luminescent protein or metal-binding protein.
- 73. (Previously presented) The method of claim 35, wherein the microorganism or cell comprises DNA encoding a fluorescent protein, luminescent protein or metal-binding protein.
- 74. (Previously presented) The method of claim 33, wherein the microorganism or cell comprises DNA encoding a luciferase and/or a substrate for luciferase.
- 75. (Previously presented) The method of claim 34, wherein the microorganism or cell comprises DNA encoding a luciferase and/or a substrate for luciferase.
- 76. (Previously presented) The method of claim 35, wherein the microorganism or cell comprises DNA encoding a luciferase and/or a substrate for luciferase.
- 77. (Previously presented) The method of claim 33, wherein the microorganism or cell comprises DNA encoding a GFP or RFP.
- 78. (Previously presented) The method of claim 34, wherein the microorganism or cell comprises DNA encoding a GFP or RFP.
- 79. (Previously presented) The method of claim 35, wherein the microorganism or cell comprises DNA encoding a GFP or RFP.

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80. (New) The method of claim 35, wherein the disease or condition is Crohn's disease, ulcerative colitis or herniated nucleus pulposis,